

EMERGENCY DEPARTMENT AND URGENT CARE VISITS FOR THE TOTAL SOLAR ECLIPSE IN VIRGINIA

August 21-23, 2017

Background

At the time of this report, the Virginia Department of Health (VDH) received data on visits to 77 acute care hospital emergency departments (EDs), 13 free-standing EDs, and 58 urgent care centers (UCCs) in Virginia for purposes of public health surveillance. The purpose of this report is to characterize ED and UCC visit trends for 2017 total solar eclipse which occurred on August 21, 2017.

Chief complaints and discharge diagnoses of ED visits are analyzed by VDH to identify and monitor issues of public health concern across Virginia. The chief complaint is a free-text field that captures the patient's primary reason for seeking medical care as interpreted by the ED registration staff. The discharge diagnosis is a coded field that uses standardized values outlined by the International Classification of Diseases (ICD) 9th and 10th Revision code sets.

Readers are strongly encouraged to review <u>syndromic surveillance data limitations</u> when interpreting this report.

Methodology

ED and UCC visits for **the total solar eclipse** were identified based on an event-specific query definition for the 2017 total solar eclipse, published by the Oregon Public Health Division in their <u>'Using ESSENCE</u> <u>for Mass Gathering Surveillance'</u> guide. (Page 8, Table 2)

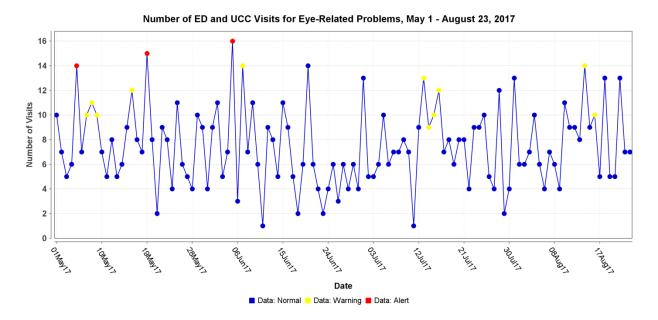
The query used for our analysis was slightly modified from Oregon's definition, to include the eclipse term within the Chief Complaint and Discharge Diagnosis. The final query is presented below:

(, ^;H53^ ,or, ^;368^ ,or, ^;H31023^ ,or, ^;E11219^ ,or, ^;36210^ ,) ,and, (, ^blind^ ,or, ^blur^ ,or, ^vision^ ,or, ^ retinopath^ ,or, ^conjunctivitis^ ,or, (, ^eye^ ,and, (, ^pain^ ,or, ^problem^ ,or, ^irritation^ ,or, ^injury^ ,) ,) ,) , andnot, (, ^foreignbody^ , ^abdominal^ , ^fall^ , ^cut^ , ^assault^ ,), or, ^eclipse^



August 21- August 23, 2017

Between August 21 and 23, 19 ED and UCC visits for eye-related problems were observed. Only visits which occurred <u>after the maximum eclipse phase</u> (2:44pm EST) in Virginia were counted.



Of the total 19 ED and UCC visits, 4 (21%) directly referenced the total solar eclipse in the Chief Complaint. The largest proportion of visits were observed among females (N=12, 63%) and those aged 20-29 (N=4, 21%). Three (16%) of the visits occurred among out of state indivduals.

Based on the overall trend in visits since May 1, no significant increase in ED and UCC visits was observed for eye-related problems after the total solar eclipse.